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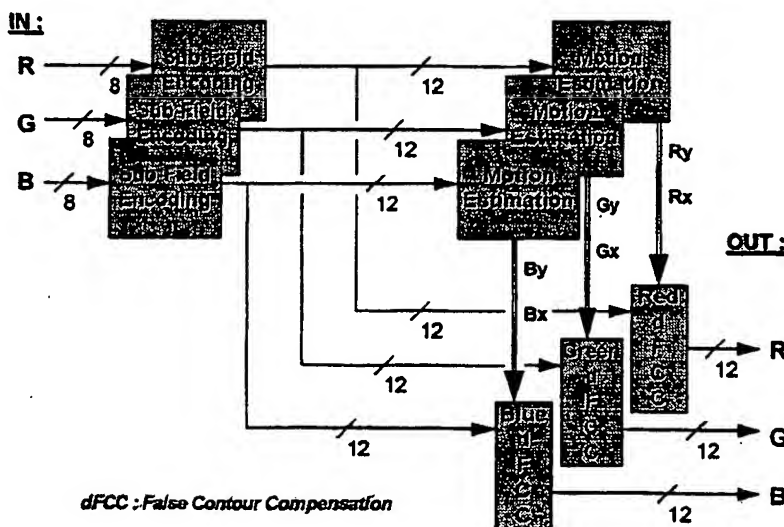
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(54) Title: **DATA PROCESSING METHOD AND APPARATUS FOR A DISPLAY DEVICE**



(57) Abstract: With the new plasma display panel technology new kinds of artefacts can occur in video pictures due to the principle that brightness control is done with a modulation of small lighting pulses in a number of periods called sub-fields. These artefacts are commonly described as 'dynamic false contour effect'. To compensate for this effect motion estimators are used and with the resulting motion vectors corrected sub-field code words are calculated for the critical pixels. Today's motion estimators work with the luminance signal component of the pixels. This is not sufficient for plasma displays. It is therefore proposed to make the motion vector calculation separately for the colour components (R, G, B) and with either the sub-field code words as data input or with single bit data input for performing motion estimation separately for single sub-fields or for a sub-group of bits from the sub-field code words. The proposal also concerns apparatuses for performing the inventive method.

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WO 01/24152 A1